"What diagnosis for Europe's ailing regions ?"

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Document type : *Document de travail (Working Paper)*

Référence bibliographique

Hurst, Christopher ; Thisse, Jacques-François ; Vanhoudt, Patrick. *What diagnosis for Europe's ailing regions ?*. Cahiers BEI ; 32 (2000)

Volume 5 No 1 2000

Cahiers Papers

Volume 5 No 1 2000

BEI EIB

Cahiers Papers

Regional development in Europe: An assessment of policy strategies

BEI EIB

European Investment Bank

What diagnosis for Europe's ailing regions?

They answered as they took their fees,
"There is no cure for this disease."
Hilaire Belloc

Christopher Hurst

Jacques-François Thisse

Patrick Vanhoudt

1. Introduction

It is not so long ago that policy makers thought that excessive regional disparities would disappear automatically in the long run. Arbitrage possibilities arising from competition and factor mobility were expected to induce a more than average growth performance in lagging regions. Having the economic engine in a higher gear would eventually make these regions reach the standard of living realised elsewhere. Where convergence was not swift enough, most likely this could be accelerated by increasing public infrastructure. Governments responded by pouring huge quantities of concrete in lagging regions.

These views have recently changed. Indeed, fifty years of costly regional policies in the post-war period have led to not much more that the *status quo* (see Quah, 1996 and 1997). Over the most recent decades, for instance, income inequality among European regions has remained rather constant from an aggregate point of view. This is discussed further in *EIB Papers*, Volume 5, Number 2 ("Regional convergence in Europe: Theory and empirical evidence"). Some economists are now taking this as the natural, or at least as the global-capitalist order of things: the rich get richer and so do the poor, but without ever catching up.

However, to believe that the productivity gaps are immutable is a mistake. There are certainly some regions within Europe that started out at relatively low levels, but have now jumped ahead. Conversely, there are others that have been on the way down the income distribution curve. Given the complex dynamics of catching-up and falling behind that are at play at the regional level the only possible approach is to look at what has happened in some real-life examples. With this in mind, we draw on several case studies of regional development (both at the regional and project level) to define a range of subjects for further discussion. We should emphasise at the outset that the purpose of the paper is *not* to discuss the effectiveness of any existing agency or programme, but rather the principles that could guide regional development policy in general. The terms, "transfers" and "grants" are used loosely throughout the paper to mean all types of financial assistance, including tax breaks, loans and guarantees.

The paper is structured as follows: in the next section we discuss the motivation for policy. Externalities and market failures are needed to justify policy intervention from an economic efficiency point of view, and we discuss how geography can lead to these problems. The main message is that market failures do exist, and countering them is a complex matter.

Section 3 discusses who finances policy interventions. Within a particular country there are usually automatic transfers between regions due to federal taxes and social payments. It will become clear

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that in Europe regional development policy also implies a transfer of resources between regions: policy that is motivated by economic efficiency will bring with it an element of income re-distribution.

Section 4 turns to project level experience to see what type of investments have contributed to regional development. Not all projects are equally effective in this task and careful project selection is critical. The effectiveness of policy in changing location decisions must also be considered.

Section 5 looks at experience in several regions in Greece, Italy and Spain. A number of features distinguish successful regions from their unsuccessful peers, not least the quality of local public administration. Public programmes to support investment have not been uniformly successful, given, amongst other factors, their lack of adaptation to local conditions.

Section 6 then addresses the possible logic for policy intervention at the EU level. This is far from straightforward, given the re-distributive nature of regional policy. However, the institutional set-up of the EU gives scope for inter-governmental transfers as part of overall consensus building. The appropriate conditionality for the use of EU funds is also discussed. When funding is used to provide incentives to the private sector, the problem of dead-weight losses - that public funds may not actually change the real economy in any tangible way - becomes particularly important.

Section 7 introduces the issue of the enlargement of the EU to Eastern Europe, and discusses what this may imply for regional development policy. The paper concludes with a summary of the policy lessons that emerge from this broad picture.

2. Spatial market failures

Why are inequalities persistent over time? Does influencing the economic tissue in regions help them to converge? Is reducing inequalities efficient, feasible or even desirable? The companion edition to this *EIB Papers* (i.e. Volume 5, Number 2) sets out the theoretical framework for assessing these questions in more detail.

There are three market failures that may give rise to persistent regional imbalances.

In brief, there are three market failures that may give rise to persistent regional imbalances. A first one is substantial technological externalities. By this we mean that firms learn from one another how to do things better. As a result, newcomers will tend to locate in those areas where there is already innovative activity, as well as the larger market. A much quoted example of this is California's Silicon Valley, though the phenomenon of "benefits that are external to the firm" had already been observed by Alfred Marshall at the end of the 19th century in his *Principles of Economics*. Urban labour markets may work better (it is easier to find someone with the right skills), there is better access to a number of shared services (such as legal, accounting, advertising, and equipment repair), and there may be a more efficient resale market for assets. Within nations, this kind of externality may induce a core-periphery pattern of economic development. Lower transportation costs are likely to reinforce a pattern where firms cluster in some locations since this reduces the chances of losing business of distant markets. Conversely, a desire by firms to relax competition on each local market tends to weaken clustering and the outcome may be too little rather than too much concentration.

This brings us to the second type of market imperfections - pecuniary externalities. As a result of the productivity differences outlined above, both skilled workers and capital will tend to flow to richer areas. Firms and workers do not, however, account for the impact of their re-location on the well being of those who stay put or of those who live in the region of destination. For instance, migration will put a downward pressure on the wage level in the region of destination while demand, and hence prices, will be boosted at the same time. It is thus possible that the economy becomes inefficiently organised.

We cannot say in general whether the combination of these externalities leads to excessive agglomeration or not. All this will depend on local circumstances, and trying to change economic geography can become very complex. For example, a new highway linking a lagging region may simply expose that region to increased competition from imports. The long-run effect, as businesses relocate away from the region, can be that jobs become scarcer – exactly opposite to what was intended.

There is a third reason why imbalances can prevail. In some cases a region does not take off because a minimum threshold of economic activity has not been established. No one knows how a new business would perform in such an area, as many prices are not known in advance. Lack of adequate information will then prevent the development of a network of service and intermediate goods suppliers, which leads, of course, to a vicious circle and persistent underdevelopment. Unfortunately, it is not clear that the information needed to counter this problem is available to governments, whereas all the other features mentioned above may also come into play. This makes the design of effective policy a challenging task.

In sum, the microeconomics of location decisions tells us that the possibility of incomplete markets and the associated co-ordination failure gives a general justification for regional policy from an efficiency point of view (in fact it is the only market failure that will always lead to unsatisfactory concentration), and that trying to change economic geography is a complex task due to the many technological and pecuniary externalities that may be at play.

Obviously, the optimal policy would be one where the economic agents responsible for a market failure also finance its correction. But where does this leave us if a co-ordination failure is the root of the regional problem?

3. The logic for regional development at the national level

Today, people in Europe tend to stay where they are despite wage differentials between regions (1). For example, a study by Obstfeld and Peri (1998) reports that labour mobility in Germany, Italy and the UK was only about one third of the US level. Their data is shown in Table 1. While

1) This is unlike the situation in the 1950s and 1960s, when some 12 million southern Europeans moved northwards.

Low mobility means that public spending for regional development must lead to transfers between groups, since the recipients are not the same as the contributors.

international comparisons of migration are difficult due to the lack of comparable data, this overall picture is confirmed by other studies. Important reasons for immobility includes the functioning of the housing market and a lack of information of job opportunities elsewhere. Low mobility means that public spending for regional development *must* lead to a transfer from one group to another, since the people who are net recipients (in the lagging region) are not the same as the net contributors (in the more prosperous region).

Why should one group wish to support another? Clearly, most societies agree that some sort of social safety net is needed for people that are unable to support themselves. It is also common that the wealthier are considered as more able to pay for these expenditures. Particularly within a *local* community it may also be in the self-interest of the more prosperous suburbs to support their less fortunate neighbours. For example, poverty may lead to the under provision of some public goods and services – e.g. street lights, public parks and other public amenities – and may breed increased criminality and vandalism in the rich areas. By accepting a premium – i.e. paying a more than proportional share of the total bill – the prosperous are able to protect their property rights without having to resort to more expensive options.

Table 1. Average net interregional migration (% of regional population).

Period	USA	Germany	Italy	UK
1970-9	1.20	0.27	0.37	0.47
1980-9	0.84	0.34	0.33	0.26
1990-5	0.87	0.31	0.40	0.20
Average relative to USA	100%	32%	38%	32%

Notes: Figures are population-weighted averages over regions. German numbers are for western *Länder* only, leaving out Berlin
Source: Obstfeld and Peri, 1998

But how does the concept of social cohesion apply to regional development when we take a broader national view? A first observation is that the inequalities of average income that are found across space within in a particular country – say differences of two-to-one at the provincial or county level (2) – are dwarfed by the scale of other income inequalities that are found within regions.

Richer regions will naturally be ready to help fund projects that are in their own interest wherever they may be located. These include (3):

2) Such as the French régions *or German* Regierungsbezirke.

3) This list is not meant to be comprehensive. There are other public goods at the national level such as defence, and when large income differentials exist the fear of immigration may also motivate transfers. It is sometimes asserted that uniform geographical distribution of economic activity is in itself a public good, but it is hard to see why this would be so.

- when major transportation connections cross poorer regions; and,
- when pollution spreads across regions, or society attaches a particular value to the natural environment wherever it may be – in other words, when the environment is a public good.

Even if they are not motivated by the goal of minimising regional inequalities, it is rarely the case that richer regions can say that everyone must accept their own geographic situation.

Self-interest aside, it is probably fair to say that taxpayers in richer regions are unlikely to be highly motivated by the goal of minimising inequalities that exist across space. However, it is rarely the case that richer regions can say that everyone must accept their own geographical situation. What makes this impossible is unemployment and the existence of national fiscal solidarity.

It is common for lagging regions to have high and persistent unemployment, and for these patterns to have remarkable stability. For example, Daniel Moucque (in *EIB Papers*, 5(2)) notes that the 25 regions with the lowest unemployment in Europe have hardly changed with an unemployment rate steady at about 4 percent. This is likely to be close to a minimum given frictional unemployment. On the other hand, rates in the most affected regions remain at over 20 percent, and even show a tendency to increase. In fact the evidence does suggest that regional growth usually comes from increasing the productivity of those already in work rather than broadening the job market.

High levels of unemployment arise, at least partially, from rigidities in labour markets. While productivity rates are lower in poorer regions than in the richer core, wages may be influenced by factors at the national level, such as wage bargaining between unions and employers (e.g. see Faini, 1999) - the result is that workers in poor regions are priced out of the market (4). Regions with persistent unemployment may be a continual drain on the public purse due to entitlements to unemployment benefits and social security payments, also set at the national level.

Fiscal payments between regions may be in everyone's interest when they act as an insurance against asymmetric shocks that hit one region after another. This may be particularly the case if regional economic structures are dominated by sectoral specialisation and monopolist industries (5). In this case, the economic costs of restructuring may be very significant, and some form of insurance is a rational response. However, this has become a very one-sided affair for many European regions due to the rigidities we have just described. Because of this richer regions may be willing to make some additional payments to poorer regions in order to reduce unemployment. These may convert into quite large sums if unemployment is high and social benefits are generous.

Of course, this may be something of a chicken-and-egg problem. The reasons for low migration are complex, but at least one of the reasons is that relatively generous social security payments reduce the incentives to search for jobs in other regions. Consequently, the best option would be to deal with the malfunctioning of the labour market directly. Lower nominal wages in poorer regions would

4) In the US regional shocks usually lead to some unemployment, so markets are not fully flexible in that country either. However, unemployment subsequently returns to a steady equilibrium rate as the unemployed migrate to other regions (see Brauerhjelm et al., 2000, for further discussion).

5) Clearly, this will depend on the size of the regions in question.

not necessarily be unequitable since housing and commuting costs are often significantly lower than in rich urbanised areas. Nevertheless, labour market reform may not be on the political agenda. The political process may rather promote regional development transfers since voters are distributed through space, and voting decisions in the poorer regions may be influenced by public spending.

Avoiding the emergence of moral hazard at the regional level may mean that aid should include certain conditionality. We return to this issue later. At the same time, it should be recognised that claimants may argue that they deserve a share of the benefits that arise due to stronger agglomeration within a small number of regions. All this shows how complex the issue of interregional equity is.

The second best option of using public spending to change economic geography would still be desirable if it is at least effective in achieving its goal. However, we have already mentioned that the complex economic forces leading to agglomeration mean that the long-run outcome of some policies may be counter-productive (6). And, aside from issues of microeconomic structures, there are important institutional issues to be addressed. Let us start with a look at which types of projects have been successful in achieving regional development in the past.

4. Lessons from *ex-post* studies

Public money is involved and there are many groups that consider they have a say in a project's outcome.

The paper by Bertrand Rossert (this volume) looks at the *ex-post* experience of a number of projects. Rossert notes that two special features distinguish regional development projects from investments in other regions. Firstly, public money is involved and this means that there are many groups who consider that they have a say in a project's outcome (e.g. local government, unions, landowners, local industries, etc.). Unfortunately, these stakeholders are not well-defined at the start of negotiations. As some can effectively block the project going ahead there can be repeated rounds of inconclusive bargaining. There seems room for improvement here, and agencies supporting regional development should strive to identify all interest groups and to see that they are involved as partners at an early stage in the project cycle.

Secondly, local public administrations have a share of responsibility for project delays due to lack of management skills and organisational failures. Rossert notes that this includes a confusion between budgeting procedures and effective multi-year planning and incentive structures that encourage individuals to avoid taking responsibility. These organisational failures extend to public administration outside lagging areas. For example, there may be little co-ordination between public fund providers who, to complicate matters, also pursue different agendas. Rossert argues that "*it is not, as is sometimes heard, that too much money is going to the regions, but that money is spread too thinly on too many projects.*" This agrees with the fact that increasing returns are present in

6) They also mean that the final distributional outcome of a particular policy is hard to determine. There could also be distributional impacts within the population of a given region. Philippe Martin (in EIB Papers 5(2)) illustrates this by assessing the impact of removing policies that hinder the relocation of business from the periphery to the core (e.g. legal barriers to plant closure).

almost all activities, and suggests that efficient regional policies should have a small and well-defined set of targets (7).

The *ex-post* examination of project outcomes shows important differences due to the size of the new investment (relative to the local economy) and the presence that an investor already has in the region through prior investments. The projects that seem to have been most effective in developing regional economies are:

- Large investments that bring a completely new business to a region. Such investors are able to modify the environment in their favour and are typically in a position to make take-it-or-leave-it proposals to local groups.

- Small projects that are fully integrated into the local economy. These are often joint-ventures to up-grade existing companies. They must establish effective local networks to survive, and may have a backbone of relationships to build upon.

Conversely, the project managers of large investments that complement existing facilities in a well-established sector (such as infrastructure) will often be in a weak negotiating position with other groups and project design and implementation gets distorted as a result. Indeed, these companies may already be part of the problem rather than part of the solution. Small projects in new sectors will often try to minimise the group of stakeholders they must deal with by setting up "off-shore" operations. These may be of very marginal benefit to the local economy.

Subsidising only one agent to the point where she decides to proceed may be a very inefficient way of going about things.

There is a third critical dimension to this typology of projects: can policy be effective in changing the location decisions of investors? If regional development is due to a co-ordination failure - a working hypothesis in this paper - then subsidising only one private agent to the point where she decides to proceed may be an extremely expensive and inefficient way to go about things. This subsidy must compensate for all the risks that markets (labour force, suppliers, etc.) do not develop as hoped, and that local institutions may hinder project implementation. These risks may not be great when relatively small firms are the main investors and local companies are involved from inception (e.g. via a joint-venture), but they may be very significant when companies from outside the region are considering a major investment in a completely new sector. A corollary is that private sector investment decisions may only be changed if the public aid provided is significant with respect to the project costs.

Policy can be based upon granting investment subsidies to certain types of projects, but the entire business environment can also be affected by a range of other factors ranging from the standard of infrastructure to the skill level of the local population. In the next section we take a broader approach to try to see what combination of factors build success.

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7) The European Commission holds a similar view with respect to geographical eligibility. For example, European Commission (1998, section 1) states: "Past experience shows that, to be effective in regional development terms such assistance should not be spread too thinly over areas which are too large or fragmented. We need to increase the concentration of Community part-financing if we are to reach a critical mass and have a significant impact…"

5. Twin stories

5.1 The case study approach

Taking a broader approach, what combination of factors builds success? What was different in those regions that failed to converge?

Would you expect two twins to run equally fast? Are there subtle differences that are not visible at first glance? What is the role of nutrition and exercise? In any country, there are regions that seemed to have been very similar to start with, but nonetheless have developed at very different rates. Clearly, it is a complex matter to try to identify the reasons why. Modern economic geography suggests that the explanation could well be the nature of the agglomeration processes which lie at the origin of regional imbalances. In order to gain more insight about what this means, we should look at what actually happened in a number of case studies to see if any common features can be identified. Three papers in this volume provide such studies for regions in Greece (by Yannis Ioannides and George Petrakos), Italy (by Rodolfo Helg, Giovanni Peri and Gianfranco Viesti), and Spain (by Andrés Rodríguez-Pose). Each study includes a region that has performed well (in national terms), and another which is lagging behind. The regions were chosen to cover a range of policy experiments, regional autonomy and geography. In the Greek case, both of the regions selected for study were relatively peripheral and had particular sectoral structures, so a third region was included as a benchmark. Note that all the studies deal with the catch-up by regions that were relatively less developed, rather than the problems of restructuring declining industrial regions. What then do our twin stories reveal?

5.2 Building strength

The "winners" in this particular competition are Crete in Greece, Abruzzo in Italy, and Navarre in Spain. At the risk of over-simplification we will try to indicate one or two points that the authors' emphasise in each case study.

Crete – Greece's most southern island – is one of the most successful regions in the country outside the metropolitan areas of Athens and Thessaloniki. A critical factor in the region's take-off was the development of the tourist industry, and this would not have happened without the construction of international airports. The tourism sector was linked into the local economy through networks of suppliers, permitting a relatively broad-based development of the regional economy.

The catalyst for the success of Abruzzo (which is on the Adriatic coast, at about the same latitude as Rome) was largely due to two main policy interventions. Firstly, regional investment incentives were similar throughout the Mezzogiorno. Abruzzo on the northern border of the assisted area benefited from what was essentially preferential treatment given the higher transport costs for locations further down the Italian peninsula. The north-south and east-west motorways allowed for a substantial reduction of transportation costs to main markets (though this did not improve the relative attractiveness of more southern regions). As a result, a number of small locally-owned plants, often sub-contractors for firms in the North, grew up in Abruzzo.

Secondly, investments from state-owned firms in Abruzzo were mainly in relatively human capital intensive industries, such as telecommunications and mechanical engineering. Interestingly this was because the lack of large ports in the region impeded the building of large petrochemical and steel plants – the strategy for much of the rest of the Mezzogiorno. As a result, Abruzzo was able to develop an economic structure based upon large "knowledge-based" factories and networks of small companies. Productivity growth was translated into job creation.

The Spanish region of Navarre lies on the French border. The two prime drivers here were the support of existing firms, particularly smaller enterprises (via favourable tax treatment and subsidies) and the attraction of foreign direct investment. Thanks to its financial and fiscal autonomy, Navarre has been able to grant special tax-breaks to encourage new investments, and this may have allowed better tailoring of the development strategy towards the region's needs.

5.3 Examining the weak

What was different in those regions that failed to converge – Peloponnese in Greece, Sicily in Italy, and Galicia in Spain?

The northern part of the Peloponnese is close to Athens, but much of the peninsula is mountainous with a thinly spread population and poor transportation connections. It is thus not surprising that firms are concentrated at the northern border. In spite of regionally differentiated national investment incentives – which made Peloponnese a favoured region – these measures failed to attract more or larger projects to the region. Policies that had aimed at exploiting local natural resources might have helped the south of the Peloponnese better. For instance, the failure of this region to fully take advantage of its coast line and historical heritage as a tourist resource, is at least in part due to poor or badly implemented policies. In fact, Ioannides and Petrakos conclude firmly that the poor quality of the public administration is the main reason behind the ineffectiveness of regional policies in Greece.

Thessaly, the third Greek region studied, is on the eastern coast of the mainland. Its industrial base was in sectors that have come under severe pressure from international competition. Industrial subsidies appear to have helped in this restructuring; however, the region has not developed the local processing of its agricultural products, and the growth of market services has been limited by the dominance of the Athens metropolis. Its relatively good administration, as reflected in its performance in implementing EU supported programmes, has allowed it to maintain an intermediate performance between the other two regions. In general, this third Greek study is in-line with the conclusions from the more clear cut success and failure.

In Sicily, on the other hand, too much emphasis was put on public expenditure. Helg *et al.*, document how this was used to fuel employment, but how, as a result, wages began to be unresponsive to productivity differentials. This became a major obstacle for the development of both private manufacturing and competitive services. In addition, as in most of the Mezzogiorno, the investment by state-owned industries was concentrated on large-scale and heavy industries. Such capital-intensive industries failed to generate backward and forward linkages with local companies. Of course, this region had an additional handicap that discouraged an inflow of private investment, namely a relatively higher crime level and the presence of the Mafia.

Galicia is in the extreme north-western corner of Spain. Here too public spending was used to generate employment in public administrations, and there was over-investment in public infrastructure. This was a relatively easy strategy for regional politicians, but has yet to have much impact. The economic fabric in Galicia consists of many small companies employing a lower skilled workforce. These firms have little capacity to network with other firms in and outside the region, and there have been only meagre results from the Galician SME support program. Rodríguez-Pose concludes that an unfocused public administration has been unable to develop effective policies, despite the region's substantial fiscal autonomy.

5.4 Developing a region's comparative advantage

A uniform approach to development would have been ineffective.

As noted earlier in this essay, the impact of regional policy depends very much on the underlying externalities at play, and the case studies illustrate that a uniform approach towards development would have been mostly ineffective.

In two cases strategic infrastructure investment changed economic geography in a favourable way – this occurred with the airports in Crete and the motorways in Abruzzo. However, in many cases road building and the construction of other public works appears to have been used as a way to put people to work rather than anything else. To give an overly simplified example, a dense network of motorways would not have helped Crete to exploit its tourism potential any better. It is perhaps for this reason that Vanhoudt et al., (in *EIB Papers* 5(2)) find no links between public investment and growth from their panel data study. When taken to the extreme, as in Sicily, public spending drives up wages to the point where the development of the private sector is stunted.

Incentives by the regional and national governments to encourage domestic investment and to attract foreign direct investment were also helpful, as the cases of Abruzzo and Navarre clearly show. The sector and industrial organisation of large industrial investments was also key. In successful regions, these investments provided an export base while also increasing the demand for supplies from local sub-contractors. In the case of Crete the tourism sector played this role, illustrating that there are options even for remote locations. However, general investment subsidies set at the national level seemed to have benefited some regions more than others, due to varying local conditions.

As with public spending, investment subsidies may be counterproductive when poorly designed. Especially when firms know that they are entitled to repeated regional support, resources may be shifted to rent-seeking activities such as (political) lobbying, rather than to investing in productivity improvements or in exploring new markets. The incentive for these rent-seeking activities increases in general with the size of the sunk-cost of the industry. This may partially explain why subsidies did not work very well in those regions with a bias towards capital-intensive heavy industries.

The importance of skills in the workforce also emerges in the Spanish and Italian success stories. This was particularly important in the development of SMEs as subcontractors to larger factories. However, human capital does not appear as a key issue in Crete, perhaps due to the nature of the tourist sector.

The dominant theme is the importance of local and regional public authorities.

The dominant theme in all three countries is the importance of local and regional public authorities. The success of policies implemented in the well-performing regions was to a large extent attributable to a much better oiled administrative machine. This is perhaps not surprising given the local knowledge needed to understand a region's strengths and weaknesses, and to help co-ordinate the development of new activities in a region.

6. Regional development at the EU level

6.1 The logic for EU policy

We have drawn a fairly coherent picture of what regional policy should be trying to do and why policy exists in the first place. But how do EU level transfers fit into the picture we have sketched out? Article 130a of the Amsterdam Treaty states that the "*Community shall aim at reducing disparities between the levels of development of the various regions and the backwardness of the least favoured regions or islands, including rural areas*", so a clear social cohesion objective exists. The Treaty also explicitly foresees that this will be achieved by financial transfers from the EU budget and through lending by the EIB.

The EU Structural Funds, at just under 1/2 percent of the Union's GDP, are the main source of grant aid for this purpose. The main focus for support is the so-called Objective 1 regions – areas which have incomes per capita of less than 75 percent of the EU average. The EIB lending for projects located in assisted areas was one-half of the Structural Funds last year. EIB loans are not explicitly subsidised, but a number of benefits (tax exemption, highest possible credit rating due to the support of member states, relatively lower return on equity vis-à-vis the private sector, etc.) are passed on to customers. The EIB can also compensate for the lack of development of financial markets in recipient regions, though the scope for this will be reduced in the post-EMU environment.

Also at the EU level we must consider the issues developed in Section 3. Why is EU intervention needed to deal with regional income gaps when there are much larger income differentials in the population of a particular country? This is even more an issue at the EU level, since social insurance is dealt with by national government - and there are not automatic fiscal transfers between countries due to unemployment differentials. At first sight, it is not clear why a group located, say, in a northern European capital city should wish to support another, completely unrelated community on a Mediterranean island. Indeed, one can think of much closer regions where there is no love lost between communities.

Why is EU intervention needed to deal with regional income gaps when there are much larger income differentials in the population of a given country?

It is also the case that the NUTS-2 regions used to assess eligibility for aid, based as they are upon administrative regions in each country, are far from being well-defined and comparable geographical units (8). What does it mean to say that the residents of Luxembourg (population, 0.4 million) are 3 times richer than those of Andalucia (population, 7.2 million), 2 1/2 times richer than Sicilians (population, 5.1 million), and more than 2 times richer than the residents of Attiki (population, 3.4 million)? The data for income inequality is further distorted by the fact that some regions are based upon the centres of major cities, and there is substantial cross-border commuting. While output is measured at workplaces, population is based upon residence. For example, Brussels has a population of close to one million, but the broader metropolitan area which can be considered as a self-contained labour market comprises over 3 million people (9).

Thisse (in *EIB Papers* 5(2)) develops another example: Ile-de-France (a NUTS-2 region) is formed by several *départements* of very varied income levels (such as Seine-Saint-Denis, a poor region, and Hauts-de-Seine, a much wealthier one), but each of which is individually comparable to NUTS-2 regions in some other countries (e.g. Belgium). Table 2 shows the ratio of incomes between the richest and poorest NUTS-3 region (equivalent to French *départements*) found within a given NUTS-2 level (in purchasing power adjusted per capita terms) (10). The dispersion alluded to before between NUTS-2 regions within a country is also shown. The problem of borders becomes more important at lower administrative levels, but the data does hint at a substantial variation of incomes within regions. These definitional problems are critical if policy is motivated by equity considerations.

Clearly, the issue of why EU intervention should be needed to deal with spatial inequalities could be avoided if transfers improve the welfare for everyone – much as we have suggested in the discussion of the local level above. Indeed, this is explicit in much of the language used to justify EU spending. For example, the European Commission (1996, p. 13) in its "First Report on Economic and Social Cohesion" states (11):

"Imbalances do not just imply a poorer quality of life for the most disadvantaged regions…but indicate an under-utilisation of human potential and a failure to take advantage of economic opportunities which would benefit the Union as a whole." [emphasis added]

Although there may be common benefits from completing communication networks or for improving the environment – these are straightforward cases – how could regional development *per se* be beneficial? In general we should start by discounting a Keynesian view that increased aggregate

8) *NUTS stands for the* Nomenclature des Unités Territoriales Statistiques, *the classification used in Eurostat's REGIO database. There are few exceptions to this classification for defining Objective 1 status for regions that qualified under a previous regime. In the following example, we use 1996 data and incomes are measured in purchasing power parity terms.*

9) *Cheshire and Hay (1989) develop these issues further. The definition of an economic "region" is also discussed in Vanhove (1999).*

10) *Of course, this requires that the NUTS-2 level consists of at least two NUTS-3 regions. This is not always the case (e.g. among others: Stockholm, Brabant Wallon, Hamburg, Navarra, Algarve).*

11) *The Maastricht Treaty (Article 130b) initiated a regular reporting by the Commission on the progress made towards achieving economic and social cohesion. This is the first such report.*

demand in the EU will benefit all members, not least because regional aid is not granted in a counter cyclical manner. Moreover, richer areas are often at full capacity, while resources in lagging regions remain under-utilised.

Table 2. Dispersion within NUTS-2 regions, 1996

Country	Maximum NUTS-3 spread	*...found in the NUTS-2 region of*	Minimum NUTS-3 spread	*...found in the NUTS-2 region of*	Ratio of maximum to minimum NUTS-2 region in the country
Germany	5.23	*Rheinhessen-Pfalz*	1.25	*Gießen*	3.11
UK	3.62	*Inner London*	1.08	*Cumbria*	3.16
France	3.53	*Ile de France*	1.04	*Alsace*	1.35
Portugal	2.89	*Norte*	1.91	*Alentejo*	1.46
Greece	2.76	*Dytiki Ellada*	1.11	*Sterea Ellada*	1.72
Netherlands	2.57	*Groningen*	1.11	*Gelderland*	1.79
Austria	2.24	*Oberösterreich*	1.16	*Vorarlberg*	2.33
Belgium	2.14	*Antwerpen*	1.20	*Vlaams Brabant*	1.70
Spain	1.58	*Castilla-la Mancha*	1.07	*Canarias*	1.82
Finland	1.44	*Uusimaa (suuralue)*	1.04	*Pohjois-Suomi*	1.75
Sweden	1.17	*Östra Mellansverige*	1.01	*Sydsverige*	1.33

Note: The spread is computed as the ratio of maximum to minimum PPP adjusted per capita income.
Source: Eurostat, REGIO database.

The mutually desirability of European transfers should be seen in the context of side-payments between governments to reach agreement on other matters.

The mutual desirability of European transfers should rather be seen in the context of side-payments between governments to reach agreement on other matters. This could be the case if there are economies of scale in some joint activity or if individual countries possess a veto on decisions (e.g. Treaties require unanimous decisions to be changed). Such payments can then still be in the net donor's interest even if there is not a great belief in pan-European income equality. Let us take an example. The creation of an integrated market may entail initial costs for some participating countries if their economies are less able to face the resulting competition. This would justify these governments running persistent deficits for a period of time. Unfortunately, such a policy response could be constrained by the parallel launch of a monetary union that requires balanced budgets if not surpluses to lower government indebtedness. The only practical solution to this dilemma may be for there to be transfers to the affected group (12).

12) Assessing the impact of the Single Market is a complex matter since adverse static shocks could be more than compensated by dynamic gains, due for example, to increased foreign direct investment (see European Commission, 1997, for some quantitative estimates). The European Commission (1990, chapter 9) gives a further discussion of the impacts of monetary union on the weaker EU economies.

To become more concrete, the Cohesion Funds, a supplement to the Structural Funds, were established by the Maastricht Treaty (Article 130d) for countries with:

- per capita GDP less than 90 percent of the community average (i.e. Greece, Ireland, Spain and Portugal);
- an agreed programme to "avoid excessive government deficits" (i.e. in accordance with Article 104c of the Treaty); and,
- to be used for environment and Trans-European transport networks.

The link between the creation of this new fund and the launch of EMU is clear, though the restriction regarding the types of eligible projects suggest that the donors were trying to ensure some further common interest.

If transfers play a broader political role, then why should a regional development label be attached to them? At the national level we have referred to the logic that regional development could be motivated by the on-going need to reduce social payments to lagging regions. By analogy, it could also be that having countries of dissimilar levels of development (or having some countries facing a steady fiscal drain due the presence of large lagging regions within their territory) decreases the likelihood of reaching a consensus on EU policies, which, in turn, raises the probability of having to make further side-payments in the future. Consequently, it would be in the interest of richer regions to use payments to boost growth in the poorer region, for this seems by and far the best pill to take against the hazards of institutional sclerosis.

Of course, the reasons for establishing EU regional development assistance are irrelevant for the agencies that are mandated to undertake this task. For them the issue is how to achieve this goal in the most effective way. What could this mean for tying conditions to the use of funds? If we look at this in general terms – rather than the technical details of any particular programme – some possible principles emerge.

6.2 Conditionality on the use of EU aid

The technical competence of local authorities may not be of the highest quality - hence the need for outside approval of investment plans.

While managers of EU aid may consider imposing conditionality on the use of funds to achieve economic development – approval of investment programmes and the like – this merits two comments. Firstly, they would not be necessary if there was full confidence in the recipient government's ability to use its funds. It presupposes that the manager of aid allocations knows better than the recipient how money should be spent. In this context, subsidiarity would suggest that relatively stream-lined conditionality should be used when dealing with EU governments. Secondly, money is fungible and, in so far as certain investments would have taken place anyway, transfers nominally intended for one purpose may simply free resources for other activities. The restriction that certain criteria should be met may not pose much of a binding constraint.

What happens when payments are made directly to local administrations, public companies, or to the private sector, rather than the coffers of the central government?

Consider local administrations first. A lesson that has emerged for the case studies of Section 5 is that local governments should be involved if policy is to be sufficiently fine-tuned. Unfortunately, the technical competence of local officials may not be of the highest quality. Indeed, a common theme in the case studies (including the *ex-post* project evaluations) is the correlation between poor regional growth and poor administration. Local politicians are more likely to be influenced by interest groups, and often the transparency of local decisions is less than at the national level. All this argues for the outside approval of investment plans.

The situation is much more complicated when aid is given to the private sector. A key issue is whether aid actually changes location decisions, or is a windfall used for other purposes.

An alternative approach is to address the problem (at least partially) at its roots through the training of public officials. This could come by requiring that a minimum percentage of the total aid package is used for this purpose, or by offering free technical assistance. Of course, advice can always be ignored, and the analysis of external consultants would have to be made available to the public if there is to be transparency over the reasons why particular choices were made.

Saint Luke's advice: "*Physician heal thyself*" should be immediately recalled at this point. As Rossert reminds us, it is often impossible to work out, *ex-post*, the level of public support that a project has received from national and European bodies. While such historical analysis does not necessarily reflect the situation today, it would be surprising if there were not scope for further improvement.

Dealing with state-owned companies (such as railways and toll road networks, etc.) may be very similar to local authorities, since staff skills in project design and implementation can be lacking. On the other hand, these companies may have a narrowly defined mission which is in-line with policy goals. This would mean that individual investments do not require detailed assessment once there is general confidence in management skills, particularly when there is a long-term relationship and funding is being provided on an regular on-going basis.

The situation is much more complicated when aid is given to the private sector. While EU competition law prohibits in principle all state aids that threaten to distort competition, it may be permitted for "*aid to promote the economic development of areas where the standard of living is abnormally low or where there is serious unemployment*" (Article 92(3)(a) of the Maastricht Treaty) (13). As mentioned before, some large projects are successful because investors have sufficient negotiating power to overcome local lobbying and to drive a project forward. It is exactly this strength which generates the risk of regulatory arbitrage and a race to the bottom between public authorities trying to attract investment to their territory, and which justifies the surveillance of EU competition authorities (14).

13) From 1994 to 1999, 50.6 percent of the population of the EU-15 lived in areas eligible for such aid (European Commission, 1998), while from 1994 to 1998 some 57 percent of manufacturing aid was spent for regional objectives (European Commission, 2000).

14) There is not a uniform view on the degree of this problem. See, for example, Besley and Seabright (1999).

Furthermore, there is the problem that project promoters act in their own self-interest, and what is profitable is not necessarily helpful for regional development. This calls for a careful assessment of whether a project will actually lead to productivity growth in a lagging region or not. Here also there would appear to be a role for a specialised assessment by neutral outsiders.

The problem of dead-weight losses is also particularly acute with the private sector – in other words does policy actually effect location decisions? If a local authority wins a grant for something that was already decided (though the decision is not necessarily known publicly), the additional grant will be used by the local authority for other purposes. It is reasonable to suppose that this money will still be used to benefit the target community in some way. Though there are trade-offs due to technical capabilities, the difficulty of knowing whether any investment is truly additional can be a powerful reason for dealing directly with local communities rather than simply passing funds to the central government. The options for using funds for other purposes (including tax cuts) are simply more limited. Much the same logic applies to some public companies (15).

Now take the case of a large private sector company which would invest in a particular region even without public support. If the company then receives aid this becomes a windfall gain that can be used for any number of purposes. This could include financing investments in completely different areas or simply increased dividends. Here, the net contribution to regional development of the funding may be very small.

Given the critical role of the private sector in regional development that emerges from the case studies, this issue must be addressed. What can be done to ensure that the real economy is changed in some positive way by public aid? It is clear that this cannot happen with the *ex-post* financing of activities that have already been undertaken. It is even unlikely to happen with investments that are already underway, unless the project happens to be running into financial difficulties. In the extreme, it would require that the decision of a private investor to go ahead is taken simultaneously with the decision to provide aid, and that the availability of finance could be documented as a factor in the location decision.

7. The enlargement of the Union

The enlargement of the Union will much increase the dispersion of EU regional incomes.

The enlargement of the Union eastwards will much increase the dispersion of EU regional incomes. The average income per capita for the entire ten candidate countries from Eastern Europe is only 15 percent of the EU average at market exchange rates, increasing to about 30 percent when adjusted for purchasing power parity. The situation improves when the more developed northern countries are considered separately (incomes are about 20 percent of the EU average at market exchanges rates, and 40 percent at PPP), but the gap remains very large. There are also substantial regional inequalities within most Eastern European countries, with relatively higher prosperity in

15) Though to be exact one should say that the aid is being used to support agencies or companies with a mission for regional development, rather than for regional development projects.

urban centres and some EU border regions where the service sector has developed strongly. In some other regions there have been severe job losses due to the restructuring of traditional industries.

From the point of view of the EU, the entire region would be eligible for support under the usual Objective 1 definition. Not only that, but even under optimistic growth scenarios it will take decades for most of the region to converge to the EU average. With a clear path set out for membership these income differentials are an issue to be dealt with today as much as when formal membership actually takes place.

In a departure from previous practice, the EU has introduced the rule that no country may receive EU Structural Funds above 4 percent of its GDP. The total budget for the Structural Funds for the 2000-2006 period will not be increased despite the additional regional problem of enlargement – it will remain at the present size of 0.46 percent of EU GDP. While there are reasons for limiting the flow of funds into an economy – and more on this below – the recent EU budget negotiations do illustrate that regional development spending must be seen within a broader context. In this particular case, it is likely that the general view was that candidate countries stand to benefit substantially from EU enlargement anyway (16).

What should be done to accelerate the catch-up of the region to the EU? The paper by Margarethe Quehenberger (this volume) looks at experience in Eastern Germany. The reunification of Germany is certainly a special case, but as an almost textbook example of a "big bang" programme, it amplifies some of the key features of government intervention.

Market failures may not be due to geography, but because the transition to a fully efficient market economy has yet to be completed.

In brief, rapid wage growth in Eastern Germany has led to a major down-sizing of the manufacturing sector. A motivation for the high wage strategy, at least after the event, was the fear that there would be excessive emigration from the region. In fact, Sinn (2000) argues that the reason for the rapid growth in wages was due to employer-union negotiations that took place in 1991. At that time there were neither Eastern Germany private entrepreneurs nor strong Eastern unions. According to Sinn, wage negotiations were dominated by Western Germans (both employers associations and unions) whose over-riding concern was to avoid job losses is Western Germany. Rapid wage growth was agreed, as an extreme example of national factors influencing local wage setting in an undesirable way.

Capital subsidies have helped those industries which have remained in business to modernise their plant and equipment, and the construction industry has boomed. However, there remains large-scale unemployment, and this is likely to be exacerbated as investment subsidies are reduced and the construction sector shrinks to a more normal level. The social security system imported from the

16) In fact most of the gains from trade liberalisation with the EU have already been achieved via current Europe Agreements. In total, it has been estimated that further benefits from lower and harmonised tariffs may only be of the order of $1^1/_2$ percent of GDPin the candidate countries (see Baldwin et al., 1997). However, much larger benefits - possible an order of magnitude larger - would arise if increased credibility in macroeconomic stability caused interest rates to drop substantially.

West means there is a considerable risk that this will evolve into a long-term unemployment problem, especially since future growth will hinge on the development of more sophisticated market services and appropriate skills will become increasingly important. Germany does appear to have created the conditions where regional development will remain on the political landscape for years to come.

A first observation for Eastern Europe is that maintaining some wage flexibility will be critical. Given that there is a continuing need for the re-allocation of the workforce between sectors, the risk of workers getting stuck in persistent unemployment is very real. Too large capital subsides also clearly distort investment decision towards excessively capital-intensive activities - but this may do little for the unemployed.

Given the general context, assistance should focus on improving the allocative efficiency of the Eastern economies. There should be a particular role for the EIB due to the relatively underdeveloped markets for long-term debt in Eastern Europe. This market failure is not due to geography *per se*, but rather because the transition of the region to a fully efficient market economy has yet to be completed.

8. Conclusions

We should accept that some regional inequality is the normal state of affairs. Indeed, interregional growth may come at the cost of greater intraregional polarisation.

Looking forward, a number of studies foresee growing regional specialisation in Europe along the lines already seen in the US (e.g. *Commisariat général du Plan*, 1999, and Bruanerhjelm *et al.*, 2000); this because the economic forces at play within the two zones will become more and more similar. Such a trend may not reinforce regional inequality if everyone finds something to specialise in. However, given that the scope for innovation varies according to sector, it is possible that there could be the polarisation of Europe into more advanced regions and poorer lagging regions in the long-run. There may also be increased mobility for the highly-skilled, but a continued lack of mobility for the lower-skilled workforce. Together with inflexible labour markets this situation could reinforce a very unequal distribution of unemployment. It is far from clear that the Single Market and EMU will actually help equalise Europe's regional income distribution.

Concentration of activity is at least partially due to spatial market failures. The most clear cut case is when there are incomplete markets and a co-ordination failure in creating new economic activities. Within a country there then is a logic for prosperous regions to help cure regional pockets of unemployment, at least until regional fiscal autonomy removes the burden of making social payments to their disadvantaged countrymen. Coming up with a motivation for EU intervention is less straightforward. The benefits of supranational support, i.e. inter-governmental transfers, should rather be seen a part of an overall consensus building exercise within a group of sovereign nations.

A general conclusion is that we should accept that some regional inequality is the normal state of affairs, much as society tolerates this within any given community. Indeed, the existence of an urban hierarchy is an almost universal phenomenon. If, as it seems, the existence of a major urban centre or of a network of connected medium-sized cities is a major factor for growth, then not all regions can perform equally if only because historical accident has led to unequal urbanisation. This also means growth may bring with it local agglomeration – and *inter*regional convergence may come at the cost of greater *intra*regional polarisation.

The regional development studies, both at a project and regional level, highlight the following features:

- Key strategic infrastructure is essential. There appear to be cases when better communications, for example, can help shift economic geography to a new equilibrium. However, this certainly does not apply in a general way to public investment. A more critical attitude about launching new transport infrastructure would be welcome.
- Industry structure is probably as important. Large factories coming to the region must have an industrial organisation and use technologies that encourage the use of local sub-contractors and forward linkages to other local companies. The chances for this are increased if the local population, particularly those employed by SMEs, have a matching set of skills.
- Tourism can also play a similar role to large factories as the export base for a region. Indeed, having an unspoilt countryside, traditional town centres, and historical monuments is an asset rather than a liability.
- Not all projects can be equally effective in generating regional economic activity. It depends, amongst other factors, upon the range of stakeholders involved, and how negotiations with these stakeholders are managed. This seems to be affected by the size of a project vis-à-vis the local economy, and the sunk costs already incurred by a project promoter in the region.
- The quality of regional government is critical if development programmes are to be sufficiently fine-tuned to local conditions. Since the information needed to design good policy is very high, we can expect many mistakes. However, the mistakes seem to occur with disproportionate frequency for some authorities.

There are a rich range of factors to consider beyond the two standard indicators of the economic rate of return and the physical location of an investment.

How do we convert these factors into a set of criteria for project selection? Clearly, many aspects will call for qualitative judgements, but that does not mean that a relatively objective view cannot be taken. The list of issues to be considered includes:

- The forecasting associated with regional development projects is complex due to the significant change to the local economic environment that is implied. Still, good forecasting should be able to capture the co-ordination problems we have referred to and projects should be economically attractive when these forecasts are used as the baseline. It would be unwise to try to manipulate cost-benefit analysis in an *ad hoc* way in an attempt to capture other externalities (such as technical spillovers). Rather these should be addressed through the broad development strategy chosen.

- This leads to a critical issue: does the project fit into a coherent strategy to develop a region's comparative advantage? For example, large-scale public investment should be clearly justified within such a framework.

- Does this broad strategy include the development of human capital? In particular, does the local administration have a track record of poor performance? If so, what steps are planned to address this problem? There may be little point in pouring money over an area in which local government is unable to become more efficient.

- Is project implementation well thought out given its particular characteristics? As delays are endemic in some lagging regions, project appraisal should assess that the complete range of stakeholders, and the associated threats to the project, have been identified. This may require relatively early participation in the project cycle. Public support for some types of project could be contingent on external project audits when they become excessively delayed.

- Does the project stimulate demand for other local companies? Are associated policy measures needed to support the development of these companies?

- In fact, more generally, can the project be considered as a stand-alone activity, or would it be better to support a package of mutually reinforcing investments? This is particularly an issue when new businesses are introduced to an area.

- Does public support actually change location decisions? Is there the likelihood that the project would go ahead anyway? In this case the windfall from public support could be used for other purposes. For example, the refinancing of investments that are underway will support the beneficiary, but will not lead to regional development unless the beneficiary has a dedicated mission with that aim. This is a particularly acute issue with the private sector, since private companies naturally pursues their own profit-maximising goals.

EU institutions should assist with the exchange of best practices on these issues.

This list, which is not exhaustive, shows the rich range of factors to be considered beyond the two standard indicators of the economic rate of return and the physical location of an investment within a particular administrative territory. As in other aspects of economic life, one role for EU institutions is to assist with the exchange of best practices on these issues.

The dominant factor in regional development is the quality of local institutions. More attention should be given to this issue. Even with the best will in the world, outsiders cannot generate high regional growth. This being said, *bad policy at the local level can be reinforced by bad policy at the national and supra-national levels*. Excessive public spending seems to be particularly pernicious. In this volume of the EIB Papers the reader will come across examples where the policies that were adopted were in the end worse than having no policy at all - to quote Francis Bacon: "*The remedy was worse than the disease*". The minimum goal of institutions involved in regional development must at least be to ensure that they avoid that state of affairs.

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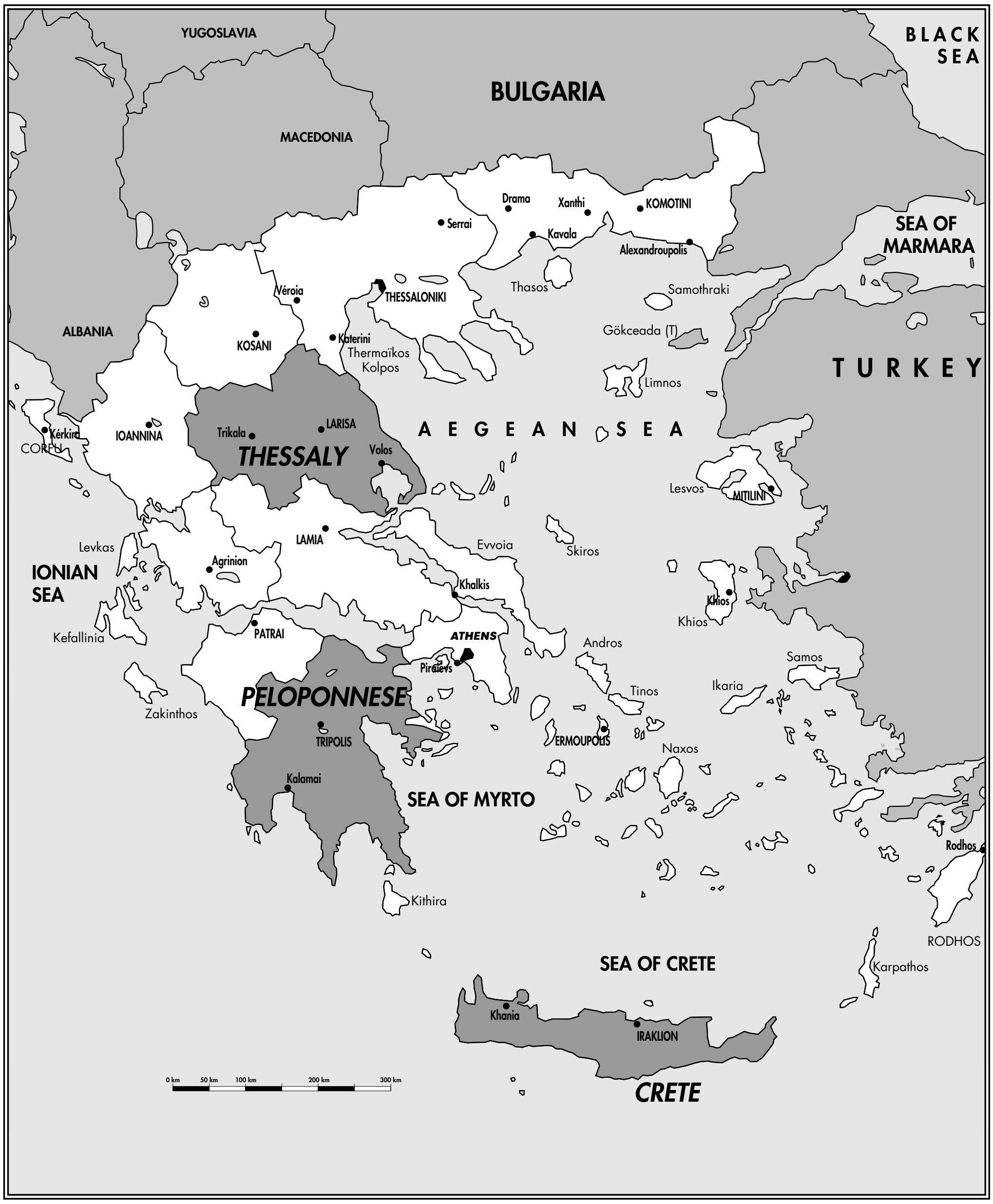
YUGOSLAVIA
BLACK SEA
BULGARIA
MACEDONIA
Drama
Xanthi
KOMOTINI
Serrai
Kavala
Alexandroupolis
SEA OF MARMARA
Véroia
THESSALONIKI
Thasos
Samothraki
ALBANIA
KOSANI
Katerini
Thermaïkos Kolpos
Gökceada (T)
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MITILINI
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